

PATENT COOPERATION TREATY

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference SS-21261-PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/KR2005/000357	International filing date (day/month/year) 05 FEBRUARY 2005 (05.02.2005)	(Earliest) Priority Date (day/month/year) 17 FEBRUARY 2004 (17.02.2004)
Applicant SAMSUNG ELECTRONICS CO., LTD. et al		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. Certain claims were found unsearchable (See Box No. II)

3. Unity of invention is lacking (See Box No. III)

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 17

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

b. none of the figure is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2005/000357

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H01L 29/78, H01L 21/335, H01L 21/336

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Korean Patents and applications for inventions since 1975
 Korean Utility models and applications for Utility models since 1975
 Japanese Utility models and application for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 e-KIPASS: "multi-gate", "FinFET", "slab", "transistor"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/0026736 A1 (GRUPP DANIEL E. et. al.) 12 FEBRUARY 2004 see the abstract, figures 5A, 5B	1- 37
A	JP 2003-197916 A (SEMICONDUCTOR ENERGY LABORATORY CO., LTD) 11 JULY 2003 see the abstract, figure 19	1- 37
A	US 6413802 B1 (THE REGENTS OF THE UNIVERSITY OF CALIFORNIA) 2 JULY 2002 see the abstract, figures 5, 6	1- 37
P, A	US 2004/0036126 A1 (INTEL CORPORATION) 26 FEBRUARY 2004 see the abstract, figures 5A~5E	1- 37
P, A	KR 2004-75566 A (SAMSUNG ELECTRONICS CO., LTD.) 30 AUGUST 2004 see the abstract, figures 8, 13	1- 37

 Further documents are listed in the continuation of Box C. See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search
16 JUNE 2005 (16.06.2005)

Date of mailing of the international search report

17 JUNE 2005 (17.06.2005)Name and mailing address of the ISA/KR

 Korean Intellectual Property Office
 920 Dunsan-dong, Seo-gu, Daejeon 302-701,
 Republic of Korea
 Facsimile No. 82-42-472-7140

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KIM, Dong Yup

Telephone No. 82-42-481-5749



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2005/000357

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004/0026736 A1	12.02.2004	AU 2003255256 A1 AU 2003255257 A1 EP 1535343 A1 KR 1020050047099 A US 06833556 B US 20040026687 A1 US 20040026736 A1 US 20040142524 A1 US 2005093027 AA US 2005104137 AA US 6833556B B WO 2004015782 A1 WO 2004030104 A1	19.04.2004 25.02.2004 01.06.2005 19.05.2005 21.12.2004 12.02.2004 12.02.2004 22.07.2004 05.05.2005 19.05.2005 21.12.2004 19.02.2004 08.04.2004
JP 2003-197916 A	11.07.2003	US 2003234395 A1	25.12.2003
US 6413802 B1	02.07.2002	NONE	
US 2004/0036126 A1	26.02.2004	AU 2003262770 A1 CN 1518771 A EP 01425801 A1 US 20040241916 A1 US 2004036126 A1 US 2004036127 A1 US 2004036128 A1 US 2004094807 A1 US 6858478 B WO 2004019414 A1	11.03.2004 04.08.2004 09.06.2004 02.12.2004 26.02.2004 26.02.2004 26.02.2004 20.05.2004 22.02.2005 04.03.2004
KR 2004-75566 A	30.08.2004	NONE	